Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (ORIGINAL) A fluid flow control system for precisely controlling fluid flow from a source of fluid under pressure,

a flow path for coupling said source of fluid to a point of utilization,

a valve in said flow path,

a flow restrictor in said flow path,

a pressure transducer connected across said flow restrictor for measuring the pressure differential thereacross and producing a signal proportional to said pressure differential, and

a controller connected to receive said signal and pulse said valve at a frequency to obtain a preset target value of pressure across said flow restrictor.

2. (ORIGINAL) A system of mixing two or more fluid streams comprising in combination the fluid flow control system defined in claim 1, coupled to a mixer which is also coupled to a source of a second fluid.

3. (PREVIOUSLY PRESENTED) The system defined in claim 1 including means for inputting a flow modifying signal to said controller or for modifying said signal due to a change in the

relationship between the pressure differential across the transducer versus the flow.

4. (ORIGINAL) The system defined in claim 2 including means for inputting a flow modifying signal to said controller or for modifying the control signal due to a change in the relationship between the pressure differential across the transducer versus the flow.

5. (WITHDRAWN) A fluid flow control system for mixing fluids from two or more sources of fluid under pressure,

a first flow path for coupling one of said sources of a first fluid to a point of utilization,

a first valve in said first flow path,

a first flow restrictor in said flow path downstream of said valve.

a first pressure transducer connected across said first flow restrictor for measuring the pressure differential thereacross and producing a signal proportional to said pressure differential,

a controller connected to receive said signal and pulse said first valve at a frequency to obtain a preset target value of fluid pressure across said flow restrictor,

a first flow path coupling said flow restrictor to a fluid mixer,

said mixer coupled to a second fluid, the flow rate of which is controlled by a second flow control means.

means coupling said first flow path to said mixer, said mixer constituting said point of utilization.

6. (WITHDRAWN) The fluid flow control system defined in claim 3 wherein said second source includes a second flow path having a second valve, a second flow restrictor and a second pressure transducer controlling a second fluid, all connected and operating as in said first flow path, and means coupling said second flow path to said mixer.

7. (WITHDRAWN) The system defined in claim 5 including means for inputting a flow modifying signal to said controller.

8. (WITHDRAWN) The system defined in claim 6 including means for inputting a flow modifying signal to said controller.

Claims 9 and 10 (CANCELLED).

11. (NEW) A fluid flow control system for precisely controlling fluid flow from a source of fluid under pressure,

a flow path for coupling said source of fluid to a point of utilization,

a control valve in said flow path, said control valve being capable of high frequency pulsed operation,

a flow restrictor in said flow path,

a pressure transducer connected across said flow restrictor for measuring the pressure differential thereacross and producing a voltage signal proportional to said pressure differential, and

a controller connected to convert said voltage signal and pulse said valve at a frequency required to obtain a preset target value of pressure across said flow restrictor to control the flow rate of said fluid.

12. (NEW) A system of mixing two or more fluid streams comprising in combination the fluid flow control system defined in claim 11, coupled to a mixer which is also coupled to a source of a second fluid.

13. (NEW) The system defined in claim 11 including means for inputting a flow modifying signal to said controller or for modifying said signal due to a change in the relationship between the pressure differential across the transducer versus the flow.

14. (NEW) The system defined in claim 11 including means for inputting a flow modifying signal to said controller for modifying the control signal due to a change in the relationship

between the pressure differential across the transducer versus the flow.